

# Fionn Ferreira: Scientist, Inventor and Sustainability Advocate

**Fionn's passion: To clean up the environment by removing microplastics from water and contribute to the achievement of a more circular economy.**

Fionn is a 20 year-old student, scientist, anti-plastic pollution innovator focusing on solving the plastic pollution crisis. Spending most of his childhood Kayaking the coasts of remote Ireland with his dog India, Fionn noticed an increasing amount of plastic washing up on the coastline and created several inventions to quantify and collect plastic pollution, with a focus on the hidden threat of microplastics.

Did you know that **we consume a credit card worth of plastic every week** through contaminated food and water, and their consumption has been linked to Alzheimer's and cancer?



Fionn built several inventions using LEGOs, bits of wood and some microcontrollers to test for these microplastics. Horrified at what he found and unable to find any methods for their removal, he decided to roll up his sleeves and build a method to remove microplastics from water himself. Following many failed attempts (some of which resulted in his home almost burning down and a power cut in his local village) he made a device which uses a magnet-based method to remove the particles from water with surprisingly high extraction rates as well as being fast, non-harmful and clean.

He left top scientists in awe at several science fairs as well as being named the **Grand Prize Global Winner of the Google Science Fair 2019**. He founded his corporation Fionn & Co. LLC in 2020 where he is using his method to test, prototype and build a device for the efficient removal of microplastics from water on a large scale. He has commissioned Stress Engineering to fine-tune, build and test his designs which has been made possible through grant funding from **Robert Downey Jr's Footprint Coalition**. He is currently seeking further funding for the project.

While Fionn is at university studying Chemistry, he is a sought after global keynote speaker. He has spoken at:

- **World Economic Forum**
- **European Commission research conference**
- **Global Plastic Health Summit**
- **Smithsonian's Earth Optimism Summit**
- **The Martin Luther King Lectures**
- **Rukami Festival, Russia**
- **Regeron ISEF**
- **And& Leuven**
- **VivaTech**
- **GreenTech Festival Berlin 2020 & 2021**
- **Young plastic pollution challenge.**

\*Complete list available upon request

Fionn was one of seven named **Global Plastic Action Partnership** Plastic Action Champions and regularly contributes to **World Economic Forum** events that advance the transition towards a circular economy for plastics.

He was named a **National Geographic Young Explorer** in early 2021 and through a grant from NatGeo is creating an online platform to help budding inventors and entrepreneurs receive the necessary information and tools to kickstart their ideas. He was named a **Forbes 30 Under 30** (Science and Healthcare 2021). He is an ambassador for **The AAT Project**.

Fionn is currently featured in a **Global HP Commercial** in addition to a spot for **Huawei**.

He is creating and developing several **children's television series** with a network. He is working on his first **children's book** for a well-known publisher.

Global HP commercial:

[https://www.youtube.com/watch?v=3GPhL5qNKO4&list=RDCMUCqcEzOKaA4nc0glSkIN0Ryw&index=2&ab\\_channel=HP](https://www.youtube.com/watch?v=3GPhL5qNKO4&list=RDCMUCqcEzOKaA4nc0glSkIN0Ryw&index=2&ab_channel=HP)

Individual HP spot:

[https://www.youtube.com/watch?v=19DRX5OzcNs&ab\\_channel=HP](https://www.youtube.com/watch?v=19DRX5OzcNs&ab_channel=HP)

## **A Few Videos**

Cultivating a prosperous future, Panel at the 2020 World Economic Forum:

<https://youtu.be/TNITuUMzmno>

End of Year Talkshow - University of Groningen

<https://youtu.be/TeUZdaUjiUY>

Greentech Festival Talkshow with Nico Rosberg

<https://youtu.be/s5tmUvheSTQ>

\*Additional videos available upon request

## **A Few Podcasts**

Top of the Class

<https://www.buzzsprout.com/1416160/6681062-ep-16-winning-the-google-science-fair-and-fighting-plastic-pollution>

Bold Moves Only

<https://www.listennotes.com/podcasts/bold-moves-only/episode-13-fionn-ferreira-19-NhURKiJ57wm/>

\*Complete list available upon request

## **Press**

Forbes

<https://www.forbes.com/sites/trevornace/2019/07/30/irish-teen-wins-2019-google-science-fair-for-re-moving-microplastics-from-water/?sh=4862058373f4>

Business Insider

<https://www.businessinsider.nl/microplastics-water-pollution-solution-from-google-2019-8?international=true&r=US>

The World Economic Forum

<https://www.weforum.org/agenda/2020/01/ocean-plastic-pollution-magnetic-liquid-irish-scientist/>

Time Magazine

<https://time.com/collection/davos-2020/5765632/young-inventors-changing-the-world/>

CNN

<https://edition.cnn.com/2019/08/01/us/irish-teen-wins-google-science-fair-trnd/index.html>

Bloomberg

<https://www.bloombergquint.com/davos-world-economic-forum-2020/davos-2020-five-things-to-watch-for-at-the-world-economic-forums-annual-meeting>

National Geographic

<https://blog.education.nationalgeographic.org/2019/07/30/teens-win-15000-national-geographic-explorer-award-at-2019-google-science-fair/>

Smithsonian Museum

<https://earthoptimism.si.edu/2020-summit/speakers/fionn-ferreira/>

\*Complete list available upon request

# A Few Speaking Topics

## **Keeping a child-like mindset to combat challenges**

Playing as an adult may seem silly, not productive or even a luxury. Fionn discusses how imaginative exploration enlarges our perception and understanding of the world. By drawing on experiences of invention and its link to the state of flow, Fionn will be sharing personal stories associating separate concepts in an unconventional way that have ultimately helped him design a new method for the removal of microplastic particles from water.

## **Plastics, circular economy and sustainability**

Fionn discusses how bioplastics, recycling, re-use and microplastics all add complexity to the efforts to solve the plastics puzzle. He highlights the importance of circularity being designed into products from the beginning and how the plastic problem cannot be blamed on the consumer.

His experience as a World Economic Forum Global Plastic Action Partnership *Plastic Action Champion* has given him insight into the steps we need to take in order to bring about the transition to a more sustainable world.

## **Re-inventing the wheel?**

Fionn believes that creativity is what is key to coming up with exciting ideas. Sometimes ideas require re-inventing-the-wheel, or rethinking a fundamental concept by exploring creative outlets and using imagination to break the chains of what is "usual" and "has worked." Art can thus, equally as essential, broaden one's perspective in science while still relying on the tried and true chemical formulas and numbers, opening doors for even more of those electrifying "Aha!" moments.

## **Educate to create**

Fionn believes that one learns just as much from failed attempts as successful ones. This talk embodies the importance of not being afraid to try every idea, no matter how big or small. Fionn will discuss how he has embraced his failures, and how they have led him to where he is exactly now in his scientific career.

## **My Journey**

It began with building and wiring the landscape around his train-set at five, which triggered the beginning of Fionn's insatiable curiosity to take things apart, see how they worked, and reassemble them into unusual inventions. At seven he observed the rising amount of plastic pollution on the coastline where he lived. This bothered him enormously, and from that point on he began his journey to create inventions to combat the growing plastic pollution issue.

**Cooking with science**

In addition to chemistry, another one of Fionn's passions is applying his knowledge of science to cooking. He will share gastronomic experiments and throw in a few mythbusters ultimately resulting in amazing gourmet meals. Prepare to be amazed as a whole wealth of knowledge is presented to you on food items and topics you may have never even raised an eyebrow at.

**Stargazing and the science of the universe**

Fionn spent a number of years curating the only planetarium in Ireland. He loves speaking about the vast universe and if there is life somewhere out there. Join Fionn as he discusses how space and the universe encourage him in his day to day work and ponder the beauty that is space.